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09/419,169

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PRASAD MIRIYALA

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08/24/2004

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EXAMINER

JAIN, RAJ K

ART UNIT

PAPER NUMBER

2664

15

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/419,169

Applicant(s)

MIRIYALA, PRASAD

Examiner

Raj Jain

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-10,12,14-16,18,20,21,23 and 24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16, 18 and 20 is/are allowed.
- 6) ☒ Claim(s) 1-6,8-10,12,14,15,21,23 and 24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 13. 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear with whom the "negotiation" process is being performed with, as only a single node within the network is being claimed. The claim in part;

".....comprising *a network node* configured to negotiate for connections.....

....wherein *the node* is configured to negotiate for....."

Clarification of the claim is required.

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 9, 10, 12, 14, 15 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonomi et al (US Pat. 6069872) in view Sharma et al (US Pat. 5,546,395).

Regarding claim 1, Bonomi discloses a system and method for controlling congestion in a packet switched communications system and in particular to an explicit rate congestion control

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system and method for an asynchronous transfer mode (ATM) communications network. The network comprising:

a number of nodes connected through one or more communication links (**Fig 1**); and  
a resource manager configured to allocate bandwidth over the communication links to high priority calls received at one or more of the nodes without dropping existing calls within the network (**Figs 2, 3; col 2 L7 – col 3 L60, col 5 L60-col 6 L35, col 8 L50-60**).

Bonomi fails to disclose the use of negotiation via selected compression schemes for existing calls transported on an outbound communications link.

Sharma discloses use of negotiation via selected compression schemes for existing calls transported on an outbound communications link, (**abstract; Fig 3; col 1 L40-56; claim 4 and also see US Pat. Li et al US Pat. 5,617,423 which Sharma incorporates**).

The use of negotiated compression schemes for voice calls reduces the overall bandwidth required per call which in turn increases the total number of calls that may be completed within a same amount of bandwidth allocated.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bonomi's rate control system to include the compression schemes as taught by Sharma so as to utilize less overall bandwidth per call yet increase the total number of calls that can be completed within the same amount of the total allocated bandwidth.

Regarding claim 2, Bonomi discloses ...negotiation conducted in a fashion that will preserve connections for existing calls associated with the node (**col 3**).

Regarding claim 3, Bonomi discloses negotiation conducted so as to cause one or more of the existing calls to consume less bandwidth over the outbound communication links than was consumed at a time prior to reception of the high priority calls, (**col 2-3, claims 1 and 9**).

Regarding claims 4, 6, 12, 14 and 24, Bonomi discloses congestion control via use of RM cells that may be used to indicate to the source node that it should increase, decrease or maintain its bit rate, (**Fig 3; col 6 L17-38**).

Regarding claims 5, 9 and 15, Bonomi discloses how one may set up a priority scheme for the desired traffic (i.e. CBR, VBR, ABR) by limiting the total bandwidth usage for a particular traffic stream and having the remainder of the bandwidth available for high priority traffic, of which can include voice calls, (**col 8 L47-67**).

Claims 8, 21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonomi et al (US Pat. 6069872) in view Sharma et al (US Pat. 5,546,395) and further in view Acharya et al. (US Pat. 6,343,326 B2).

Regarding claims 8, 21 and 23, Bonomi discloses a system and method for controlling congestion in a packet switched communications system and in particular to an explicit rate congestion control system and method for an asynchronous transfer mode (ATM) communications network. The network comprising:

a number of nodes connected through one or more communication links (**Fig 1**); and

a resource manager configured to allocate bandwidth over the communication links to high priority calls (**Figs 2, 3; col 2 L7-col 3 L60**) received at one or more of the nodes without dropping existing calls within the network (**Fig 3, col 5 L60-col 6 L35, col 8 L50-60**).

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Bonomi fails to disclose the negotiation via selected compression schemes for existing calls transported on an outbound communications link.

Sharma discloses use of negotiation via selected compression schemes for existing calls transported on an outbound communications link, (**abstract; Fig 3; col 1 L40-56; claim 4 and also see US Pat. Li et al US Pat. 5,617,423 which Sharma incorporates**).

The use of negotiated compression schemes for voice calls reduces the overall bandwidth required per call which in turn increases the total number of calls that may be completed within a same amount of bandwidth allocated.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bonomi's rate control system to include the compression schemes as taught by Sharma so as to utilize less overall bandwidth per call yet increase the total number of calls that can be completed within the same amount of the total allocated bandwidth.

Bonomi and Sharma fail to disclose dynamic renegotiation via OAM cell exchange between the nodes.

Acharya discloses dynamic renegotiation via OAM cell exchange between the nodes (see col 8 L14-26, col 9 L35-67 and cols 13-14).

Negotiation and further dynamic renegotiation via exchange of OAM cells allows for continuous flow control through the network without having to tear down the network connections. Furthermore the use of OAM cells is well known in the art, which is used to provide a variety of information between network nodes including cell loss ratios, network fault management, and performance management between network nodes and/or devices.

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Therefore, it would have been obvious to one of ordinary skill in the art to modify Bonomi and Sharma to incorporate OAM cell exchange so as to dynamically renegotiate call parameters based on existing network conditions and therefore providing a continuous network connection for subject nodes of interest.

Further with respect to claim 21, Bonomi also discloses **a means** for managing of communication links between nodes of interest, (**see claim 9**).

Further with respect to claim 23, Bonomi discloses an ATM network (**Fig 1**) with various nodes, communication devices (computers, fax, phone, etc.) the use of a computer readable medium to provide efficient bandwidth management and therefore efficient communications link amongst various elements is inherent within the system.

### ***Allowable Subject Matter***

Claim 16 is allowed.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-6, 8-10, 12, 14, 15, 21, 23 and 24 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raj Jain whose telephone number is 703-305-5652. The examiner can normally be reached on M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4336. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

RJ  
August 18, 2004



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